

Fluid Power Pump and Motor Manufacturing: 2002

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2002 Economic Census

Manufacturing

Industry Series



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-- Not applicable for this report.

Table 1. Historical Statistics for the Industry: 2002 and Earlier Years

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry and year ¹	Com- panies ²	All estab- lish- ments ³	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expendi- tures (\$1,000)	
			Number ⁴	Payroll (\$1,000)	Number ⁴	Hours (1,000)	Wages (\$1,000)					
333996, Fluid power pump and motor manufacturing	2002..	139	171	12 908	565 368	8 455	17 106	311 866	1 288 766	1 168 389	2 493 589	70 368
	2001..	N	N	13 610	542 658	9 131	18 011	295 753	1 322 403	1 241 065	2 575 451	78 564
	2000..	N	N	15 934	634 297	10 870	22 725	370 888	1 541 764	1 571 689	3 077 416	110 033
	1999..	N	N	15 620	611 710	10 656	21 765	358 668	1 487 407	1 376 117	2 879 843	113 979
	1998..	N	N	17 189	672 415	11 880	25 015	397 437	1 625 557	1 423 212	3 008 751	143 708
	1997..	149	168	15 963	620 397	11 065	22 551	359 816	1 526 099	1 283 790	2 811 223	112 115

¹Statistics presented for years ending in 2 and 7 are census data. Interim census years are derived in a representative sample of manufacturing establishments canvassed in the Annual Survey of Manufactures (ASM).

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during the year.

⁴Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 2. Industry Statistics for Selected States: 2002

[States that are a disclosure or with less than 100 employees are not shown. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographical definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

Industry and geographic area	E ¹	All establishments ²		All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
		Total	With 20 employees or more	Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
333996, Fluid power pump and motor manufacturing												
United States	—	171	68	12 908	565 368	8 455	17 106	311 866	1 288 766	1 168 389	2 493 589	'70 368
California	—	16	6	704	34 413	417	645	14 865	87 689	55 222	145 108	'2 548
Florida	—	8	3	363	12 199	261	548	6 505	28 585	23 051	51 361	'781
Illinois	—	12	8	1 788	73 534	1 344	2 577	49 430	137 080	226 759	380 759	'10 629
Kansas	—	5	4	696	26 053	569	1 155	18 840	109 159	52 820	162 400	'3 083
Michigan	2	13	6	874	44 362	523	941	21 397	67 260	73 799	141 243	'4 360
Minnesota	—	6	3	325	14 498	192	375	6 744	30 071	33 230	64 346	'607
Ohio	—	15	6	1 437	64 173	919	1 859	35 921	109 588	137 581	252 922	'12 392
Texas	4	13	2	171	5 791	116	225	3 168	14 388	10 950	25 427	'234
Wisconsin	1	8	5	684	29 148	304	661	10 745	31 235	24 132	57 951	'2 480

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 3. Detailed Statistics by Industry: 2002

[Data based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). For information on confidentiality protection, sampling error, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Item	Value
333996, Fluid power pump and motor manufacturing	
Companies ¹	number.. 139
All establishments ²	number.. 171
Establishments with 1 to 19 employees	number.. 103
Establishments with 20 to 99 employees	number.. 31
Establishments with 100 employees or more	number.. 37
All employees ³	number.. 12 908
Total compensation	\$1,000.. 730 846
Annual payroll	\$1,000.. 565 368
Total fringe benefits	\$1,000.. 165 478
Production workers, average for year	number.. 8 455
Production workers on March 12	number.. 8 539
Production workers on May 12	number.. 8 528
Production workers on August 12	number.. 8 388
Production workers on November 12	number.. 8 362
Production worker hours	1,000.. 17 106
Production worker wages	\$1,000.. 311 866
Total cost of materials	\$1,000.. 1 168 389
Materials, parts, containers, packaging, etc., used	\$1,000.. 939 907
Resales	\$1,000.. 164 075
Purchased fuels	\$1,000.. 2 809
Purchased electricity	\$1,000.. 20 602
Contract work	\$1,000.. 40 996
Quantity of electricity purchased for heat and power	1,000 kWh.. 361 598
Quantity of electricity generated less sold for heat and power	1,000 kWh.. -
Total value of shipments	\$1,000.. 2 493 589
Primary products value of shipments	\$1,000.. 2 075 546
Secondary products value of shipments	\$1,000.. 171 708
Total miscellaneous receipts	\$1,000.. 246 335
Value of resales	\$1,000.. 199 473
Contract receipts	\$1,000.. D
Other miscellaneous receipts	\$1,000.. D
Primary products specialization ratio	percent.. 92
Value of primary products shipments made in all industries	\$1,000.. 2 388 496
Value of primary products shipments made in this industry	\$1,000.. 2 075 546
Value of primary products shipments made in other industries	\$1,000.. 312 950
Coverage ratio	percent.. 87
Value added	\$1,000.. 1 288 766
Total inventories, beginning of year	\$1,000.. 444 286
Finished goods inventories	\$1,000.. 138 062
Work-in-process inventories	\$1,000.. 151 462
Materials and supplies inventories	\$1,000.. 154 762
Total inventories, end of year	\$1,000.. 397 494
Finished goods inventories	\$1,000.. 169 555
Work-in-process inventories	\$1,000.. 83 535
Materials and supplies inventories	\$1,000.. 144 404
Gross value of depreciable assets (acquisition costs) at beginning of year	\$1,000.. '1 248 677
Total capital expenditures (new and used)	\$1,000.. '70 368
Buildings and other structures (new and used)	\$1,000.. '10 342
Machinery and equipment (new and used)	\$1,000.. '60 026
Automobiles, trucks, etc., for highway use	\$1,000.. '838
Computers and peripheral data processing equipment	\$1,000.. '3 721
All other expenditures for machinery and equipment	\$1,000.. '55 467
Total retirements	\$1,000.. '65 821
Gross value of depreciable assets at end of year	\$1,000.. '1 253 224
Depreciation charges during year	\$1,000.. '106 015
Total rental payments	\$1,000.. 14 926
Buildings and other structures	\$1,000.. 7 693
Machinery and equipment	\$1,000.. 7 233
Total other expenses ⁴	\$1,000.. 213 837
Response coverage ratio ⁵	percent.. 94
Repair and maintenance services of buildings and/or machinery ⁴	\$1,000.. 18 427
Communications services ⁴	\$1,000.. 5 709
Legal services ⁴	\$1,000.. 4 504
Accounting, auditing, and bookkeeping services ⁴	\$1,000.. 2 336
Advertising and promotional services ⁴	\$1,000.. 3 978
Expensed computer hardware and supplies and purchased computer services ⁴	\$1,000.. 6 164
Refuse removal (including hazardous waste) services ⁴	\$1,000.. 2 166
Management consulting and administrative services ⁴	\$1,000.. 11 769
Taxes and license fees ⁴	\$1,000.. 8 994
All other expenses ⁴	\$1,000.. 134 288

¹For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Based on 2002 Annual Survey of Manufactures (ASM) sample data.

⁵A response coverage ratio is derived for this item by calculating the ratio of the weighted employment (establishment data multiplied by sample weight) for those Annual Survey of Manufactures (ASM) establishments that reported to the weighted total employment for all ASM establishments classified in this industry.

Note 1: The amounts shown for other expenses reflect only those services that establishments purchase from other companies.

Note 2: The data in this table are based on the 2002 Economic Census and the 2002 Annual Survey of Manufactures (ASM). To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain sampling errors and nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 4. Industry Statistics by Employment Size: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Employment size class	E ¹	All establishments ²	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ³	Payroll (\$1,000)	Number ³	Hours (1,000)	Wages (\$1,000)				
333996, Fluid power pump and motor manufacturing											
All establishments	—	171	12 908	565 368	8 455	17 106	311 866	1 288 766	1 168 389	2 493 589	'70 368
Establishments with—											
1 to 4 employees	8	51	119	5 036	81	146	2 702	11 628	11 162	22 826	'335
5 to 9 employees	9	25	165	7 355	115	223	3 982	16 022	14 864	30 936	'474
10 to 19 employees	5	27	342	14 395	207	424	7 074	29 210	29 472	60 253	'2 565
20 to 49 employees	3	16	554	23 281	351	667	12 486	53 982	41 442	97 086	'3 791
50 to 99 employees	—	15	1 051	40 605	689	1 290	19 466	111 993	63 617	177 395	'1 745
100 to 249 employees	—	20	3 515	154 496	2 323	4 444	87 892	345 566	259 589	610 414	'18 358
250 to 499 employees	—	13	4 842	210 985	3 396	7 152	126 901	451 276	510 205	980 732	'32 929
500 to 999 employees	—	4	2 320	109 215	1 293	2 760	51 363	269 089	238 038	513 947	10 171
1,000 to 2,499 employees	—	—	—	—	—	—	—	—	—	—	—
2,500 employees or more	—	—	—	—	—	—	—	—	—	—	—
Administrative records ⁴	9	82	409	17 572	285	556	10 057	39 161	37 177	76 336	'1 226

¹Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. This technique was also used for a small number of other establishments whose reports were not received at the time data were tabulated. The following symbols are shown where estimated data account for 10 percent or more of the figures shown: 1–10 to 19 percent; 2–20 to 29 percent; 3–30 to 39 percent; 4–40 to 49 percent; 5–50 to 59 percent; 6–60 to 69 percent; 7–70 to 79 percent; 8–80 to 89 percent; 9–90 percent or more.

²Includes establishments with payroll at any time during the year.

³Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

⁴Some payroll and sales data for small single-establishment companies with up to 20 employees (cutoff varied by industry) were obtained from administrative records of other government agencies rather than from census report forms. These data were then used in conjunction with industry averages to estimate statistics for these small establishments. Data are also included in respective size classes shown.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 5. Industry Statistics by Primary Product Class Specialization: 2002

[Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note at end of table. For meaning of abbreviations and symbols, see introductory text]

Industry or product class code	Industry or primary product class	All establishments ¹	All employees		Production workers			Value added (\$1,000)	Total cost of materials (\$1,000)	Total value of shipments (\$1,000)	Total capital expenditures (\$1,000)
			Number ²	Payroll (\$1,000)	Number ²	Hours (1,000)	Wages (\$1,000)				
333996	Fluid power pump and motor manufacturing	171	12 908	565 368	8 455	17 106	311 866	1 288 766	1 168 389	2 493 589	'70 368
3339961	Nonaerospace type reciprocating fluid power pumps	22	3 787	165 948	2 403	4 644	88 740	373 915	544 410	949 401	'26 823
3339963	Nonaerospace type rotary and other fluid power pumps	19	2 932	117 646	2 021	4 023	64 934	278 954	176 732	456 432	'22 205
3339965	Nonaerospace type fluid power motors	8	1 304	52 520	918	2 007	36 326	124 184	87 401	211 074	'9 453
3339967	Aerospace type fluid power pumps and motors	9	1 398	77 737	681	1 413	30 362	135 930	116 064	253 558	'4 169
3339969	Parts for fluid power pumps, motors, and hydrostatic transmissions	19	2 253	97 691	1 591	3 270	60 906	248 352	151 657	402 143	'6 165

¹Includes establishments with payroll at any time during the year.

²Number of employees figures represent average number of production workers for pay period that includes the 12th of March, May, August, and November plus other employees for payroll period that includes the 12th of March.

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6a. **Products Statistics: 2002 and 1997**

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Product code	Product	Number of companies with shipments of \$100,000 or more	Quantity of production for all purposes	Product shipments	
				Quantity	Value (\$1,000)
333996	Fluid power pump and motor manufacturing	2002.. N	X	X	2 388 496
	1997.. N		X	X	2 606 309
3339961	Nonaerospace type reciprocating fluid power pumps	2002.. N	X	X	632 926
	1997.. N		X	X	661 302
33399611	Nonaerospace type reciprocating fluid power pumps	2002.. N	X	X	632 926
	1997.. N		X	X	661 302
3339961100	Nonaerospace type reciprocating fluid power pumps ¹	2002.. 32	X	X	632 926
	1997.. 37		X	X	661 302
3339963	Nonaerospace type rotary and other fluid power pumps	2002.. N	X	X	492 249
	1997.. N		X	X	501 080
33399631	Nonaerospace type rotary and other fluid power pumps	2002.. N	X	X	492 249
	1997.. N		X	X	501 080
3339963100	Nonaerospace type rotary and other fluid power pumps ¹	2002.. 30	X	X	492 249
	1997.. 44		X	X	501 080
3339965	Nonaerospace type fluid power motors	2002.. N	X	X	369 815
	1997.. N		X	X	541 994
33399651	Nonaerospace type fluid power motors	2002.. N	X	X	369 815
	1997.. N		X	X	541 994
3339965100	Nonaerospace type fluid power motors ¹	2002.. 29	X	X	369 815
	1997.. 33		X	X	541 994
3339967	Aerospace type fluid power pumps and motors	2002.. N	X	X	212 870
	1997.. N		X	X	221 735
33399671	Aerospace type fluid power pumps and motors	2002.. N	X	X	212 870
	1997.. N		X	X	221 735
3339967100	Aerospace type fluid power pumps and motors ¹	2002.. 25	X	X	212 870
	1997.. 26		X	X	221 735
3339969	Parts for fluid power pumps, motors, and hydrostatic transmissions	2002.. N	X	X	509 978
	1997.. N		X	X	502 056
33399691	Parts for fluid power pumps, motors, and hydrostatic transmissions	2002.. N	X	X	509 978
	1997.. N		X	X	502 056
3339969100	Parts for fluid power pumps, motors, and hydrostatic transmissions ¹	2002.. 53	X	X	509 978
	1997.. 64		X	X	502 056
333996W	Fluid power pump and motor manufacturing, nsk, total	2002.. N	X	X	170 658
	1997.. N		X	X	178 142
333996WY	Fluid power pump and motor manufacturing, nsk, total	2002.. N	X	X	170 658
	1997.. N		X	X	178 142
333996WYWW	Fluid power pump and motor manufacturing, nsk, for nonadministrative-record establishments	2002.. N	X	X	99 122
	1997.. N		X	X	107 215
333996WYWY	Fluid power pump and motor manufacturing, nsk, for administrative-record establishments	2002.. N	X	X	71 536
	1997.. N		X	X	70 927

¹For additional detail, see Current Industrial Report MA333N, Fluid Power Products.

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.

Table 6b. Product Class Shipments for Selected States: 2002 and 1997

[Product classes covered are those that are economically significant and whose production is geographically dispersed, provided dispersion is not approximated by data in Table 2. Also, product classes are not shown if they are miscellaneous or "not specified by kind" classes. Statistics for some states are withheld because they are either less than \$2 million in product class shipments or they disclose data for individual companies in 2002. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, explanation of terms, and geographic definitions, see note at end of table. For information on geographic areas followed by *, see Appendix D. For meaning of abbreviations and symbols, see introductory text]

NAICS product class code	Product class and geographic area	Value of product shipments (\$1,000)
3339961	Nonaerospace type reciprocating fluid power pumps	
	United States	2002 .. 632 926
		1997 .. 661 302
	Florida	2002 .. 8 575
		1997 .. 3 588
	Wisconsin	2002 .. 17 519
		1997 .. 9 062
3339963	Nonaerospace type rotary and other fluid power pumps	
	United States	2002 .. 492 249
		1997 .. 501 080
	Florida	2002 .. 38 236
		1997 .. 14 675
	Illinois	2002 .. 107 763
		1997 .. 126 889
	Kansas	2002 .. 15 235
		1997 .. N
	Ohio	2002 .. 43 666
		1997 .. N
3339965	Nonaerospace type fluid power motors	
	United States	2002 .. 369 815
		1997 .. 541 994
	Illinois	2002 .. 54 016
		1997 .. 169 700
	Ohio	2002 .. 6 949
		1997 .. N
3339967	Aerospace type fluid power pumps and motors	
	United States	2002 .. 212 870
		1997 .. 221 735
	California	2002 .. 33 019
		1997 .. 22 838
	Ohio	2002 .. 11 094
		1997 .. 15 604
3339969	Parts for fluid power pumps, motors, and hydrostatic transmissions	
	United States	2002 .. 509 978
		1997 .. 502 056
	California	2002 .. 50 256
		1997 .. 24 961
	Florida	2002 .. 21 947
		1997 .. 2 275
	Michigan	2002 .. 10 204
		1997 .. 5 407
	Minnesota	2002 .. 6 742
		1997 .. N
	Ohio	2002 .. 15 317
		1997 .. 33 065

Note: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C. For geographical definitions, see Appendix D.

Table 7. Materials Consumed by Kind: 2002 and 1997

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. Data based on the 2002 Economic Census. For information on confidentiality protection, nonsampling error, and explanation of terms, see note 2 at end of table. For meaning of abbreviations and symbols, see introductory text]

Material code	Material consumed	Quantity	Delivered cost (\$1,000)
333996	Fluid power pump and motor manufacturing		
00900001	Total materials .....2002..	X	939 907
	.....1997..	X	1 029 642
33399603	Fluid power pumps purchased for incorporation into manufactured products .....2002..	X	26 727
	.....1997..	X	76 252
33272203	Metal bolts, nuts, screws, washers, rivets, and other screw machine products .....2002..	X	64 411
	.....1997..	X	76 790
33291901	Metal pipe, valves, and pipe fittings (excluding forgings) .....2002..	X	13 358
	.....1997..	X	19 794
33200075	Other fabricated metal products (excluding forgings) .....2002..	X	58 955
	.....1997..	X	71 034
33210000	Forgings .....2002..	X	26 865
	.....1997..	X	N
33151001	Iron and steel castings (rough and semifinished) .....2002..	X	61 430
	.....1997..	X	104 552
33152005	Aluminum and aluminum-base alloy castings (rough and semifinished) .....2002..	X	47 923
	.....1997..	X	25 666
33152003	Other nonferrous metal castings, rough and semifinished (including aluminum and aluminum-base alloy).....2002..	X	3 041
	.....1997..	X	D
33120007	Steel bars, bar shapes, and plate (excluding castings, forgings, and fabricated metal products) .....2002..	X	23 129
	.....1997..	X	28 812
33120016	Steel sheet and strip (including tinplate) .....2002..	X	4 857
	.....1997..	X	N
33121000	Steel tubing .....2002..	X	D
	.....1997..	X	7 294
33120061	All other steel shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	2 293
	.....1997..	X	67 790
33131601	Aluminum and aluminum-base alloy extruded shapes (extruded rod, bar, pipe, tube, etc.) .....2002..	X	7 974
	.....1997..	X	N
33100047	Other aluminum and aluminum-base alloy shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	X	D
33100077	Other nonferrous shapes and forms (excluding castings, forgings, and fabricated metal products) .....2002..	X	D
	.....1997..	X	13 370
331000AA	Metal powders .....2002..	X	18 408
	.....1997..	X	12 248
32410005	Lubricating and cutting oils .....2002..	X	6 020
	.....1997..	X	7 769
32551002	Paints, varnishes, stains, lacquers, shellacs, japans, enamels, and allied product .....2002..	X	809
	.....1997..	X	N
33531201	Electric motors and generators .....2002..	X	34 730
	.....1997..	X	45 855
33299105	Ball bearings (mounted or unmounted) .....2002..	X	9 531
	.....1997..	X	8 997
33299103	Roller bearings (mounted or unmounted) .....2002..	X	30 046
	.....1997..	X	20 597
33361301	Plain bearings and bushings .....2002..	X	5 110
	.....1997..	X	19 227
33361200	Mechanical speed changers, gears, and industrial high-speed drives .....2002..	X	9 566
	.....1997..	X	11 411
33999103	Gaskets (all types), and packing and sealing devices .....2002..	X	12 453
	.....1997..	X	11 003
33351503	Cutting tools for machine tools .....2002..	X	20 545
	.....1997..	X	24 601
00970099	All other materials and components, parts, containers, and supplies .....2002..	X	318 064
	.....1997..	X	172 557
00971000	Materials, ingredients, containers, and supplies, nsk .....2002..	X	122 937
	.....1997..	X	157 997

Note 1: For some establishments, data have been estimated from central unit values that are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: p-10 to 19 percent estimated; q-20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by S.

Note 2: The data in this table are based on the 2002 Economic Census. To maintain confidentiality, the Census Bureau suppresses data to protect the identity of any business or individual. The census results in this table contain nonsampling errors. Data users who create their own estimates using data from American FactFinder tables should cite the Census Bureau as the source of the original data only. For explanation of terms, see Appendix A. For full technical documentation, see Appendix C.